

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of the claims in the application, without prejudice to or disclaimer of the subject matter therein.

Claims 20, 62-63, 66-71, and 73-77 have been cancelled without prejudice to or disclaimer of the subject matter therein.

Claims 1, 18, 57-61, 72 and 78 have been amended, without prejudice to or disclaimer of the subject matter therein.

Claims 79-81 have been added.

Listing of Claims:

1. (Currently Amended) An isolated protein capable of affecting an abscisic acid (ABA) response and comprising:

- (i) a hydrophobic C-terminus;
- (ii) at least one coiled coil region;
- (iii) an EF-hand consensus sequence;
- (iv) a nucleotide binding site; and optionally
- (v) a hydrophilic N-terminus;

wherein said protein participates in ABA signalling as measured by its ability to participate in ABA-mediated control of ion channels.

2. (Previously Presented) An isolated protein according to claim 1 which is capable of being cleaved by the toxin botulinum C.

3. (Cancelled)

4. (Previously Presented) An isolated protein according to Claim 1 wherein the hydrophobic C-terminus comprises the sequence from position 282 to position 296 of the amino acid sequence shown in SEQ ID NO:2.

5. (Previously Presented) An isolated protein according to claim 1 wherein the hydrophobic C-terminus comprises the sequence from position 280 to position 294 of the amino acid sequence shown in SEQ ID NO:2.

6. (Previously Presented) An isolated protein according to Claim 1 wherein said at least one coiled coil region comprises the sequence from position 210 to position 247 of the amino acid sequence shown in SEQ ID NO:2.

7. (Previously Presented) An isolated protein according to Claim 1 wherein said at least one coiled coil regions comprises the sequence from position 216 to position 240 of the amino acid sequence shown in SEQ ID NO:2.

8. (Previously Presented) An isolated protein according to Claim 1 wherein said hydrophilic N-terminus comprises the sequence from position 1 to position 280 of the amino acid sequence shown in SEQ ID NO:2.

9. (Previously Presented) An isolated protein according to claim 1 wherein the hydrophilic N-terminus comprises the sequence from position 1 to position 279 of the amino acid sequence shown in SEQ ID NO:2.

10. (Previously Presented) An isolated protein according to Claim 1 wherein said nucleotide binding site comprises the sequence of positions 114 to 119 of the amino acid sequence shown in SEQ ID NO:2.

11. (Previously Presented) An isolated protein according to Claim 1 wherein the nucleotide binding site comprises the sequence of positions 116, 118 and 120 of the amino acid sequence shown in SEQ ID NO:2.

12. (Previously Presented) An isolated protein according to Claim 1 wherein said EF-hand consensus sequence comprises the sequence from position 16 to 28 of the amino acid sequence shown in SEQ ID NO:2.

13. (Previously Presented) An isolated protein according to Claim 1 wherein said hydrophobic C-terminus comprises a membrane spanning region.

14. (Previously Presented) An isolated protein according to Claim 1 wherein there are three coiled coil regions.

15. (Previously Presented) An isolated protein according to Claim 1 wherein said at least one coiled coil region corresponds to an epimorphin pattern.

16. (Previously Presented) An isolated protein according to Claim 6 wherein said at least one coiled coil region corresponds to an epimorphin pattern.

17. (Previously Presented) An isolated protein according to Claim 1 that is derived from a plant.

18. (Currently Amended) An isolated protein comprising the amino acid sequence shown in SEQ ID NO:2, or a biologically active fragment ~~or variant thereof~~, wherein said protein; or said biologically active fragment thereof ~~or variant thereof~~ participates in abscisic acid (ABA) signalling as measured by its ability to participate in ABA-mediated control of ion channels.

19. (Previously Presented) A method of screening for protein-protein interaction comprising:

- a) contacting a protein according to any one of Claims 1-18 with an expressed candidate abscisic acid (ABA) signalling component; and
- b) detecting interaction between said protein and said ABA signalling component.

20. (Cancelled)

21-56. (Cancelled)

57. (Currently Amended) An isolated protein which affects an abscisic acid (ABA) response and comprises an amino acid sequence having at least 50% ~~homology~~ identity to the amino acid sequence shown in SEQ ID NO:2, ~~or a biologically active fragment thereof~~, wherein said protein ~~or fragment thereof~~ participates in ABA signalling as measured by its ability to participate in ABA-mediated control of ion channels.

58. (Currently Amended) ~~The isolated protein of Claim 57, comprising~~ An isolated protein which affects an abscisic acid (ABA) response and comprises an amino acid sequence having at least 75% ~~homology~~ identity to the amino acid sequence shown in SEQ ID NO:2, ~~or a biologically active fragment thereof~~, wherein said protein ~~or fragment thereof~~ participates in ABA signalling as measured by its ability to participate in ABA-mediated control of ion channels.

59. (Currently Amended) ~~The isolated protein of Claim 57, comprising~~ An isolated protein which affects an abscisic acid (ABA) response and comprises an amino acid sequence having at least 85% ~~homology~~ identity to the amino acid sequence shown in SEQ

ID NO:2, ~~or a biologically active fragment thereof~~, wherein said protein ~~or fragment thereof~~ participates in ABA signalling as measured by its ability to participate in ABA-mediated control of ion channels.

60. (Currently Amended) ~~The isolated protein of Claim 57, comprising~~ An isolated protein which affects an abscisic acid (ABA) response and comprises an amino acid sequence having at least 95% homology identity to the amino acid sequence shown in SEQ ID NO:2, or a biologically active fragment thereof, wherein said protein ~~or fragment thereof~~ participates in ABA signalling as measured by its ability to participate in ABA-mediated control of ion channels.

61. (Currently Amended) An isolated protein which ~~affects an ABA response and comprises the amino acid sequence shown in SEQ ID NO:2~~ , ~~or a biologically active fragment thereof~~, wherein said protein ~~or fragment thereof~~ participates in ABA signalling as measured by its ability to participate in ABA-mediated control of ion channels.

62-63. (Cancelled)

64. (Previously Presented) An isolated protein according to Claim 1, wherein said protein affects ABA-mediated control of guard cell K⁺ and Cl⁻ channels.

65. (Previously Presented) An isolated protein according to Claim 1, wherein said protein affects ABA-mediated stoma closure regulation in a plant.

66-71. (Cancelled)

72. (Currently Amended) An isolated protein according to ~~Claim 71~~ any one of Claims 57-60, wherein said protein is capable of being cleaved by the toxin botulinum C.

73-77. (Cancelled)

78. (Currently Amended) ~~The isolated protein of Claim 77,~~ An isolated protein comprising amino acids 1-279 of SEQ ID NO:2, or a biologically active fragment thereof, wherein said protein or said biologically active fragment thereof inhibits an abscisic acid (ABA) response.

79. (New) The isolated protein according to Claim 78, wherein the protein or biologically active fragment thereof inhibits an ABA response as measured by the ability to inhibit ABA-mediated control of ion channels.

80. (New) The isolated protein according to Claim 78, wherein the protein comprises amino acids 1-279 of SEQ ID NO:2.

81. (New) The isolated protein according to Claim 1, wherein the protein, when overexpressed in a host cell, augments ABA signalling as measured by its ability to participate in ABA-mediated control of ion channels.